

REMARKS

In the Office Action of September 23, 2004, claims 5, 8 and 9 were objected to. Claims 1-4, 6 and 7 were rejected under 35 U.S.C. §103(a) as being unpatentable over the applicants' admitted prior art set forth in Figs. 2A-2F in view of Shirai (USP 5,422,505). The admitted prior art shows several basic MOS structures. The '505 patent discloses an MOS device having a gate in which the oxide thickness varies along the length of the gate between the source region 11 and the drain region 12.

In contrast, applicants claim 1 as filed specified a method for fabricating a transistor in which a composite oxide layer is formed that is "thicker near at least one end of the gate." Applicants' Fig. 1 indicates that the length (L) of the gate extends in the y-direction, which is the direction that runs from the source region to the drain region, and that the width of the gate extends in the z-direction. Applicants' specification states at page 1, lines 21 and 22 that "a reference to the ends of the gate will be understood to refer to opposite ends of the gate in the z-direction." Thus, applicants' statement in claim 1 that the oxide layer is thicker near at least one end of the gate refers not to a variation in oxide thickness along the length of the gate but rather to a variation in oxide thickness along the width of the gate. Shirai makes no suggestion that the oxide thickness varies in that direction.

In the interests of clarifying applicants' invention, applicants have amended claim 1 to specify that the composite oxide layer is "thicker near at least one end of a width of the gate" (emphasis supplied). This change is not believed to alter the scope of claim 1 because the specification makes it clear at page 1, lines 20-22 that the reference to the ends of the gate refers to the opposite ends of the gate in the z direction which direction is referred to as the width of the gate.

The Examiner's courtesy in a telephone interview today concerning this limitation is gratefully acknowledged. The Examiner acknowledged that the Shirai reference does not disclose the structure described in applicants' invention.

In the absence of any suggestion in Shirai that the oxide thickness vary along the width of the gate, claim 1 and claims 2-9 which are dependent thereon are patentable over the references cited.

The specification has been amended as requested by the Examiner to refer to the substrate by the number 22 at page 1, line 25. Minor errors in the claims have also been corrected. The specification has also been corrected at page 1, lines 17 and 18 to indicate that the gate is referred to as having a length L that extends in the y – direction of Fig. 1A.

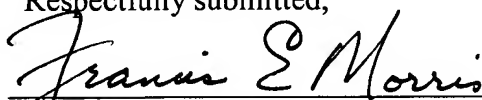
A new claim 20 has been added which rewrites in independent form claim 5 which was indicated to be allowable.

A new claim 21 has also been added that is similar to claim 1 but specifies that the gate extends between first and second isolation regions and the oxide layers are thicker near at least one isolation region. This structure is the cross-sections shown in Fig. 3B where gate 220 extends between isolation regions 230 and 240 and the oxide layers are identified as elements 205, 206 and 210. Claim 21 is patentable for the same reason claim 1 is patentable.

In view of the forgoing remarks, the claims in this application are believe to be in condition for allowance. Such action is respectfully requested. If the Examiner believes a telephone interview would expedite prosecution of this application, he is invited to call applicants' attorney at the number given below.

Date: January 24, 2005

Respectfully submitted,

A handwritten signature in cursive script that reads "Francis E. Morris". The signature is written in dark ink and is positioned above a horizontal line.

Francis E. Morris
Registration No. 24,615
**MORGAN LEWIS &
BOCKIUS LLP**
101 Park Avenue
New York, NY 10178
(212) 309-6632